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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,608	02/27/2002	Hiroo Yabe	020251	1778

23850 7590 07/16/2003

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EXAMINER

STERRETT, JEFFREY L

ART UNIT PAPER NUMBER

2838

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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083,608

EXAMINER

ART UNIT	PAPER NUMBER
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4

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- ☐ Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The drawing(s) filed on 2/27/02 is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

3. Figure 21 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The disclosure is objected to because throughout the disclosure the space between words is either almost nothing or simply missing. For example see line 8 of page 1 and line 5 of page 2. Appropriate correction is required.

5. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 are vague and indefinite since in lines 5 and 8 of claim 1 "the voltage drops" and "a voltage drop" are recited but it unclear whether these recitations are the same of or

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different voltage drops. It is also noted that in line 2 of claim 1 "MOSFET between connected" should simply be --MOSFET connected--.

Claim 2 is vague and indefinite since in lines 4 "the voltage drop" accordingly lacks proper antecedent basis.

Appropriate correction is required.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-7 and 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schmidt et al (US 5,550,702).

9. Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmidt et al.

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Schmidt et al teaches a load drive-control circuit as recited by claim 8 except for utilizing a diode as the generically taught thermoelectric element. Official notice is taken that utilizing a diode as a thermoelectric element was an old and known expedient in the art at the time of the invention. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the load drive-control circuit of Schmidt et al by utilizing a diode as the generically taught thermoelectric element since doing so was an old and known expedient in the art at the time of the invention.

10. Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Schmidt et al in combination with Hastings et al (US 6,356,423).

Schmidt et al teaches a load drive-control circuit as recited by claim 9 except for utilizing a plurality of load drive-control circuits to control a plurality of loads. Utilizing a plurality of load drive-control circuits to control a plurality of loads was an old and known expedient in the art at the time of the invention as taught by Hastings et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the load drive-control circuit of Schmidt et al by utilizing a plurality of load drive-control circuits to control a plurality of loads since doing so was an old and known expedient in the art at the time of the invention as taught by Hastings et al.

~~11.~~ The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Guajardo (US 4,581,540), Blessing (US 5,187,632), Maher et al (US 5,723,915), Pernyeszi (US 5,847,593), Thomas (US 6,052,268), Feldkeller (US 6,137,668), Ohsaka et al (US 6,205,010), Mansfield (US 6,381,114), and Pahl et al (US 6,590,757) are cited to show load drive-control circuits old and known in the art at the time of the invention.

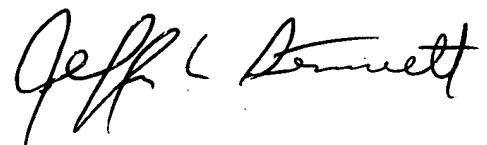
~~12.~~ Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sterrett whose telephone number is (703) 308-1632. The examiner can normally be reached on Monday through Thursday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry, can be reached on (703) 308-1680. The fax phone number for this Art Unit is (703) 305-7723 and the fax phone number for this Group is (703) 305-3431 or (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

jls

July 11, 2003



Jeffrey L. Sterrett

Primary Examiner

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